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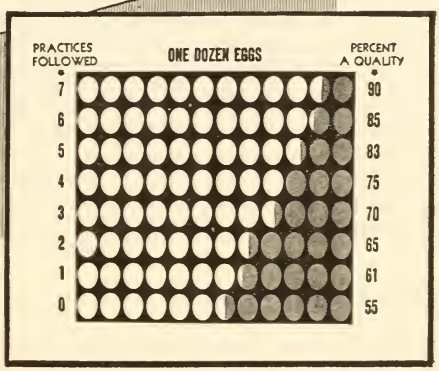
Seven Ways TO GREATER EGG PROFIT

1. Confine laying flocks
2. Provide clean, dry floor litter
3. Provide clean, dry nesting material
4. Gather eggs frequently
5. Gather eggs in wire baskets
6. Cool eggs before packing, and keep them cool
7. Maintain proper humidity in storage rooms



UNITED STATES DEPARTMENT OF AGRICULTURE

LEAFLET No. 327

368368°—55

Seven Ways to Greater Egg Profit

Seven recommended flock-management and marketing practices definitely increase the number of top-grade eggs that producers send to market.

This is shown by a study conducted by the United States Department of Agriculture, in cooperation with agricultural experiment stations of 13 major egg-producing States in the Midwest. Facts furnished by 9 of these States were the basic material for the drawing on the front cover of this leaflet. The study also showed clearly that the number of top-grade eggs marketed increased with the number of recommended practices that the producers followed.

Producers who followed all seven of the recommended practices marketed eggs that averaged 90 percent Grade A quality. On the other hand, producers who followed none of the recommended practices marketed eggs that averaged only 55 percent Grade A.

Growing consumer demand for eggs of high quality means greater gross income to the poultryman who produces and markets a large percentage of top-grade eggs.

With a little extra effort, every producer can follow the seven recommended practices. And with today's demand for A-quality eggs, he can do this with assurance that he will have more top grades to market and greater returns.

The Midwestern States in which the study of these practices was conducted comprise a surplus-producing area which is depended on each year to supply not only the consumer requirements for eggs within that area but also a part of the demand in heavily populated, deficit egg-producing areas.

Producers specializing in egg production generally follow the seven recommended practices. Experience has proved to such producers that doing so results in higher quality eggs and greater profits. Many, but not all, less specialized producers are also likely to find it to their advantage to adopt these practices. Therefore, individual producers should consider the cost as well as the income effects of these practices in making decisions relative to adopting them.

Confining the Laying Flock

This is a sound, time-tested farm-flock-management practice known to result in greater production and more high-quality eggs. The laying flock should be confined in suitable poultry houses that are well ventilated at all times. Houses should be large enough to provide each layer with from 3 to 4 square feet of space. Without proper shelter, layers do not produce at full efficiency. Furthermore, lack of proper housing is likely to result in more stained and dirty eggs, as well as in low production.

Overcrowding in a poultry house is as bad a practice as that of permitting the hens to roam. The result is sure to be a lower rate of production and a higher percentage of stained and dirty eggs. A far better practice is to keep no more layers in the flock than the housing facilities will comfortably accommodate.

Laying Hens Should Be Roomers . . .

Not Roamers . . .

To determine the effect on egg quality of these flock-management practices, the methods employed on 646 farms in the 9 Midwestern States were studied. From this total number of farms, the 174 farmers who at all times kept their flocks confined marketed eggs that averaged 78 percent A quality. On 61 farms where confinement was practiced only a part of the time, the percentage of A quality eggs was 74, but on 411 farms where the laying flocks were not confined, the percentage of A quality eggs marketed was only 66.

Providing Clean, Dry Floor Litter

This is a flock-management practice which provides more A quality eggs. Clean, dry litter is frequently the difference between clean eggs and dirty or stained eggs. Many types of litter are available and most of them are inexpensive. Spreading the litter, and keeping it dry and clean, reduces the chore of cleaning dirty eggs.

Under the study conducted in the 9 Midwestern States, the effect of dry floor litter on egg quality was examined on 498 farms. Of this total, the 465 farmers who had dry floor litter marketed 70 percent A quality eggs. The 33 farmers who had damp floor litter, marketed eggs that averaged only 57 percent A quality. Condition of floor litter from the standpoint of cleanliness was studied on 488 farms. The 127 farms that supplied clean litter marketed 78 percent A quality eggs, 156 farms where slightly dirty litter was found marketed 70 percent A quality, and the 205 farms where dirty litter was found marketed only 63 percent A quality eggs.

Providing Clean, Dry Nesting Material

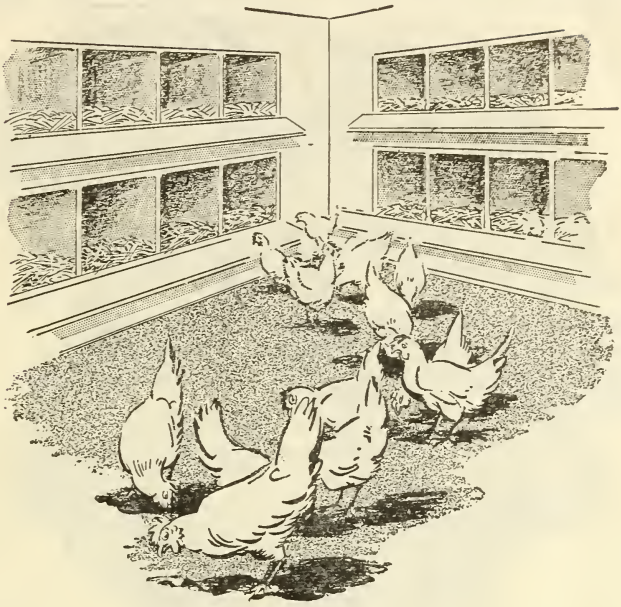
This is another flock-management practice that is important in providing more A quality eggs. The average farm has plenty of nesting material at hand, or readily obtainable.

The nine-State study indicated that the use of clean, dry nesting material is a fairly general practice among farm flock operators. Dry nesting material was found to be the rule on 482 farms, and 70 percent of the eggs marketed from these farms were A quality. On 13 farms where damp nesting material was found, only 50 percent of the eggs marketed were A quality. Clean nesting material was provided on 314 of the farms studied and 75 percent of the eggs marketed from these farms were A quality, whereas the percentage dropped to 63 on farms where the nesting material was slightly dirty and to 52 percent on farms where it was dirty.

Gathering Eggs Frequently

The gathering of eggs at least three times a day, is one of the most necessary of all recommended marketing practices. The longer eggs remain in the nest after they are laid the more they deteriorate. Prolonged exposure to sun or any heat is fatal to egg quality. Based on the methods employed by commercial egg producers, egg collections should be made a minimum of three times a day, preferably at 10 a. m., between 12 and 1 p. m., and again at 4 p. m. Results of the nine-State study indicate that a fourth collection period will result in a further improvement in egg quality.

Layers Need Clean Nests and Litter . . .



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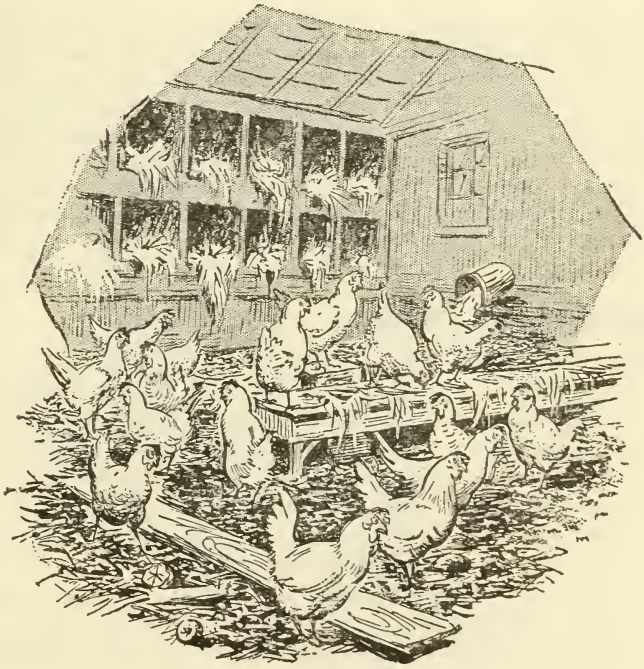


Collect Eggs Frequently in Wire Baskets . . .

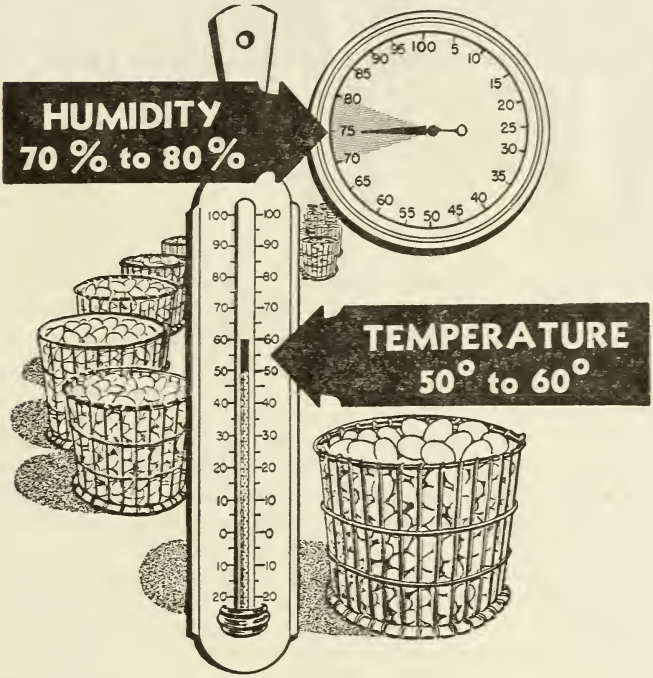
Of the 647 farms studied as to frequency of daily egg collection, it was found that on only 35 farms were eggs collected four times a day. On these farms 84 percent of the eggs marketed were A quality. On 113 farms on which collections were made three times daily, 79 percent of the eggs were A quality. Collections were made twice daily on 346 farms or more than half of the total number studied relative to this specific practice. The farms on which eggs were collected twice a day marketed eggs which averaged 70 percent A quality. The 153 farms on which eggs were collected only once a day marketed eggs that averaged only 60 percent Grade A.

Collecting Eggs in Wire Baskets

Eggs should be collected from the hen house in wire baskets because these help to prevent breakage and are more convenient than some other types of containers. Wire baskets permit free circulation of air to cool eggs rapidly and thereby reduce the chance of quality deterioration before the eggs are packed into cases. The use of pails of either metal or wood, boxes, or woven wooden baskets is not recommended, because they do not permit the eggs to cool rapidly enough, even when they are placed in cooling rooms.

On the 624 farms studied, 193 of the operators used wire baskets to collect eggs. From these farms 76 percent of the eggs marketed were A quality. Woven baskets were used on 32 farms and the quan-

Cool and Store Eggs Under These Conditions . . .



Not These . . .

tity of Grade A eggs marketed averaged 70 percent, whereas on the 399 farms on which pails or buckets were used for collecting eggs, only 67 percent of the eggs marketed were Grade A.

Cooling Eggs Before Packing and Maintaining Proper Humidity

These are two marketing practices that go hand in hand. The first step is to remove eggs to a cooling room as soon as they are collected. A refrigerated room, of course, is ideal, but may not be profitable because of high costs of investment and operation. Cool basements, caves, or springhouses are generally satisfactory and usually are low in cost. Maintenance of a relatively high humidity is also important. Where natural conditions are not satisfactory, mechanical means can be used to supply the necessary humidity. Rapid quality deterioration is certain to follow if eggs are not properly cooled or stored.

The study relative to proper temperatures for the cooling and holding of eggs was made on 614 farms. On 296 of these farms it was found that cooling and storage room temperatures were maintained at 50° to 69° F. and that the eggs marketed were 72 percent Grade A. On 266 of the farms, average temperatures were 70° to 79° F. and eggs marketed averaged 66 percent Grade A. Only 52 farmers stored their eggs in locations where the temperature was 80° F. or higher, and these farmers marketed eggs that averaged only 55 percent Grade A.

The humidity factor, according to a study of conditions in the cooling rooms on 554 farms, proved to be only slightly less important than temperature. The eggs marketed from 358 farms on which humidities of 70 percent or more were maintained averaged 72 percent A quality, whereas on 196 farms on which the prevailing humidity in cooling rooms was below 70 percent, the eggs marketed averaged 67 percent A quality.

The study also indicated that conditions in certain locations were more favorable for the storage of eggs. Basements or caves, naturally cooled, were used for storage purposes on 520 farms which marketed eggs that averaged 72 percent A quality. On 126 farms, where porches, kitchens, or similarly unsatisfactory locations were employed for storage purposes, the quality of eggs marketed averaged 63 percent Grade A.

This publication summarizes in popular form the results of a study of the effect of producer practices on egg quality. The study was made in part under authority of the Agricultural Marketing Act of 1946 (RMA, Title II). The findings are reported in greater detail in Marketing Research Report No. 22, entitled "Poultry Farm Practices and Egg Quality," published by the United States Department of Agriculture, in cooperation with the agricultural experiment stations of the 12 North Central States and Kentucky.

Information on which both of these reports is based was furnished to the Department by the following nine States: Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio, and Wisconsin.

In addition to the above, the following States and agencies are members of the North Central Regional Research Committee: Illinois, Michigan, South Dakota, Kentucky; and the Agricultural Marketing Service and the Farmer Cooperative Service, United States Department of Agriculture.

Issued May 1952 U. S. GOVERNMENT PRINTING OFFICE: 1955 Slightly Revised December 1955

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price 5 cents